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**REMARKS**

In view of the following discussion, the Applicant submits that none of the claims now pending in the application is made obvious under the provisions of 35 U.S.C. §103. Thus, the Applicant believes that all of these claims are now in allowable form.

**I. REJECTION OF CLAIMS 1-17, 20-51 AND 54-79 UNDER 35 U.S.C. §103**

The Examiner rejected claims 1-17, 20-51, and 54-79 under 35 U.S.C. §103(a) as being unpatentable over the Lockwood patent (U.S. Patent No. 6,554,618, issued April 29, 2003, hereinafter "Lockwood") in view of the Kershaw et al. patent (United States Patent No. 5,565,316, issued October 15, 1996, hereinafter "Kershaw"). The Applicant respectfully traverses the rejection.

First, the Applicant respectfully submits that neither Lockwood nor Kershaw discloses or suggests forwarding a query pertaining to a structured entity, as claimed in the Applicant's independent claims 1, 21, 35, 55, 69, 74, and 79. Specifically, as described in the Applicant's specification, a structured entity is a query that has a plurality of structurally interrelated parts (e.g., the parts of a multi-step process or a multi-part biological organism, to name some examples, See, e.g., Applicant's published application at least at paragraphs 0106-0109). Although the individual questions posed by Lockwood's or Kershaw's exams may relate to one another at a high level (i.e., pertain to a common subject, such as math), nowhere in Lockwood nor in Kershaw is it suggested that the questions are structurally interrelated (e.g., to each other as multiple parts of a larger query).

The Examiner submits that "[t]he level of complexity of each part [of a multi-part question] and designing the questions such that they are interrelated is merely a matter of design choice" (Office Action, Page 6). The Applicant respectfully submits, however, that this argument misses the point of the invention. Conventional technology-based classroom assessment systems are based upon simple stimulus and response types and are unable to support more powerful assessment techniques such as self-explanation (i.e., wherein a learner deliberately attempts to explain a complex concept in a step-by-step fashion, using sound reasons for each step). This is, in part, because

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many students require assistance or intervention to engage in self-explanation. It is therefore difficult to electronically administer queries that involve true structured entities, due to their plurality of parts and the interrelation of those parts. For example, an exam taker must be provided with a meaningful way of conveying his or her answer (e.g., an adequate means for self-explanation). Sufficient gauging of the exam taker's understanding therefore requires a more inventive means for response than, say, a multiple choice or true/false question in which no self explanation is necessary. A query based on a structured entity thus implies more than a matter of "design choice" – it implies the manner in which the exam taker is expected to answer, and the potential choices or formats for response that can be provided to the exam taker for use in answering the query.

Moreover, neither Lockwood nor Kershaw discloses or suggests forwarding a plurality of response templates for answering the query, as claimed in Applicant's independent claims 1, 21, 35, 55, 69, 74, and 79. Specifically, the invention claimed by the Applicant forwards a plurality of response templates to a client device (operated by an exam taker), where each of the forwarded templates may potentially be used to answer the same query. This allows the exam taker to select which template(s) to use for each part of his or her response to the query, as well how many templates together will form the response. Thus, the exam taker has a degree of control over the form in which he or she uses the response templates to answer the query. This facilitates self-explanation of the exam taker's response to the query, for instance wherein the exam taker attempts to deliberately explain a complex concept in a step-by-step fashion.

The Examiner acknowledges that "Lockwood does not specifically disclose ... forwarding a plurality of response templates for answering the query ..." (Office Action, Page 2); however, the Examiner submits that Kershaw bridges this gap in the teachings of Lockwood. The Applicant respectfully disagrees. Kershaw by contrast, teaches that the person posing a query (i.e., an exam developer) selects a single format or exercise type for the response (e.g., multiple choice, scale, etc.). As illustrated by Figures 43-47 of Kershaw, the response format (e.g., "template") is defined and presented to the exam taker based on the exercise type. Thus the template forwarded to the exam taker for

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use in answering the question is a single template selected by the developer; the exam taker has no control over the format of his or her answer.

Additionally, neither Lockwood nor Kershaw teaches or discloses that an exam taker's answer submitted in response to part of the exam links parts of the exam. As discussed above, the structured entity according to the Applicant's claimed invention, by definition, comprises a plurality of interrelated parts. A proper response to a query pertaining to the structured entity therefore links the plurality of interrelated parts (e.g., the answers to some parts may depend on or otherwise account for the answers to other parts), as recited in Applicant's independent claims 1, 21, 35, 55, 69, 74, and 79. Nowhere in Lockwood or Kershaw is it suggested that an exam taker's response links any of the questions posed in the exam, or that there is any correlation among the questions other than that they potentially pertain to a common subject (e.g., all are math problems). As discussed above, the use of queries based on structured entities and the requirement for answers to be linked in an interrelated manner poses more than a question of design choice.

The Applicant's claims clearly recite that a response to a query pertaining to a structured entity comprises a completed response template that is selected by the user (answerer) from among a plurality of forwarded templates for answering the query and that links a plurality of parts of the structured entity. Lockwood and Kershaw, as discussed, fail to disclose or suggest any of these features. Specifically, Applicant's claims 1, 21, 35, 55, 69, 74 and 79 positively recite:

1. A method for providing feedback, said method comprising the steps of:
  - a) forwarding a query pertaining to a structured entity having a plurality of parts;
  - b) forwarding a plurality of response templates for answering the query; and
  - c) receiving a response from a first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)
21. A method for providing feedback, said method comprising the steps of:
  - a) receiving a query pertaining to a structured entity having a plurality of

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parts;

b) receiving a plurality of response templates for answering the query; and

c) providing a response to an aggregating device from a first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)

35. A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause the processor to perform the steps comprising of:

a) forwarding a query pertaining to a structured entity having a plurality of parts;

b) forwarding a plurality of response templates for answering the query;

and

c) receiving a response from a first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)

55. A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause the processor to perform the steps comprising of:

a) receiving a query pertaining to a structured entity having a plurality of parts;

b) receiving a plurality of response templates for answering the query; and

c) providing a response to an aggregating device from a first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)

69. An apparatus for providing feedback, said apparatus comprising:

means for forwarding a query pertaining to a structured entity having a plurality of parts and for forwarding a plurality of response templates for answering the query; and

means for receiving a response from a first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)

74. An apparatus for providing feedback, said apparatus comprising:

means for receiving a query pertaining to a structured entity having a

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plurality of parts and for receiving a plurality of response templates for answering the query; and

means for providing a response to an aggregating device from a first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)

79. A system for providing feedback, said system comprising:  
a first client device; and  
an aggregating device for forwarding a query pertaining to a structured entity having a plurality of parts and a plurality of response templates for answering the query to said first client device, where said aggregating device receives a response from said first client device, wherein said response comprises a completed response template linking a plurality of parts of said structured entity. (Emphasis added)

As discussed, neither Lockwood nor Kershaw discloses or suggests that a response to a query pertaining to a structured entity comprises a completed response template that is selected by the exam taker from among a plurality of forwarded templates for answering the query and that links a plurality of parts of the structured entity, as claimed in Applicant's independent claims 1, 21, 35, 55, 69, 74 and 79. Therefore, the Applicant submits that independent claims 1, 21, 35, 55, 69, 74 and 79 fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

Dependent claims 2-17, 20, 22-34, 36-51, 54, 56-68, 70-73 and 75-78 depend from claims 1, 21, 35, 55, 69 and 74 and recite additional features therefore. As such, and for at least the same reasons set forth above, the Applicant submits that claims 2-17, 20, 22-34, 36-51, 54, 56-68, 70-73 and 75-78 are not made obvious by the teachings of Lockwood in view of Kershaw. Therefore, the Applicant submits that dependent claims 2-17, 20, 22-34, 36-51, 54, 56-68, 70-73 and 75-78 also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

## II. CONCLUSION

Thus, the Applicant submits that all of the presented claims now fully satisfy the requirements of 35 U.S.C. §103. Consequently, the Applicant believes that all of these


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claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of a final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

1/15/08  
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